

REMARKS

Claims 1-7 and 9-10 were pending in the present Application. Claims 1 and 10 have been amended, Claims 11 and 12 have been added, leaving Claims 1-7, 9-12 for further consideration the present amendment.

Support for the amendment to Claim 1, 10 can be found on page 13, lines 14-22, wherein it is disclosed that a method (or a structure) inn which freedom of a dihedral angle between two aromatic rings (such as a benzene ring) planes is restrained. Also, Applicants' disclose the TCBP1 structure on page 17, which is also employed in sample OLED No. 1-1 of Example 1 in the originally filed application. Support for newly added claims 11, 12 can be found in the specification at page 15, line 6 to page 16, line 19.

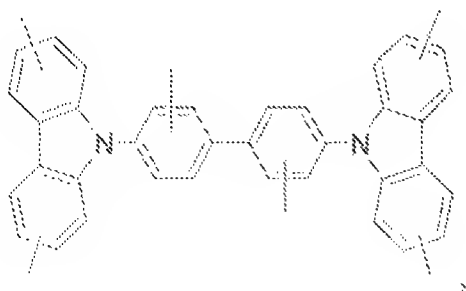
Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. § 102(e)

Claims 1-7 and 9-10 stand rejected under 35 U.S.C. § 102(e), as allegedly anticipated by Thompson et al. (U.S. Pat. No. 6,902,830). Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

The Office Action refers to Thompson as providing disclosure for the following molecules:

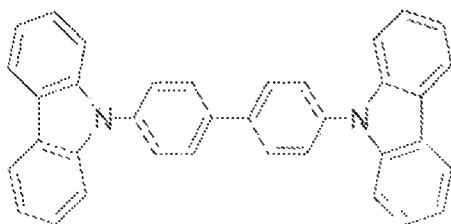


“wherein a line segment denotes possible substitution at any available carbon atoms or atoms of the indicated rings by alkyl or aryl groups (see column 32, line 40-column 33, line 33). The Thompson reference reads on the present claims when R1 and R2 are alkyl and aryl, na and nb are both 1; and Ar1 represents a phenylene group substituted with an alkyl or aryl group.” Applicants respectfully disagree.

Claims 1 and 10 have been amended as above to further limit Ar1 of Formula 2, wherein the substitution position of the substitution in the substituted phenylene group Ar1 is specified and limited to the ortho position. Claims 1 and 10 are patently distinguished from Thompson in that the host compound is represented by Formula 1 and has a reorganization energy of from more than 0 to 0.50 eV.

Thompson only discloses substituted triaryl amines as host materials (see column 7, lines 7-9) and discloses, as one example of the substituted tri-aryl amines, various carbazole compounds without any specific limitations (see column 7, lines 10-24 and column 32, line 38 to column 33, line 45.) Thompson does not specifically disclose the host compound as claimed. Moreover, Thompson is silent as to the reorganization energies for its host materials.

Further, Thompson does not disclose high emission luminance and long life time that the claimed host compounds exhibit. Rather, Thompson refers to at column 33, lines 33-45, that “[a]n additional preferred molecule with a carbazole functionality is 4, 4’-N,N’ dicarbazole- biphenyl (which is commonly referred to as CBP). CBP has the following formula:



CBP is the only specific compound disclosed by Thompson as an example of a suitable carbazole compound. However, as is disclosed in Example 1, of Applicants' specification, inventive sample OLED No. 1-2 employing the host compound (TCBP1) as claimed provided high emission luminance and long life time as compared to comparative sample OLED No. 1-1, which employed CBP and had a reorganization energy of 0.56 eV. This reorganization energy falls outside the scope of Applicants claimed range of from more than 0 to 0.50 eV. CBP is characterized by Thompson as a preferred carbazole molecule, which clearly falls outside the scope of Applicants' claims.

In view of the foregoing, Claims 1-7 and 9-10 are not anticipated by Thompson and the rejection is requested to be withdrawn.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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